

CLAIMS

What is claimed is:

1. An apparatus for preventing a writing error from occurring on an optical disc in an optical disc drive having a wobble signal generator, the apparatus comprising:
an interpolation ATIP sync signal detector which receives a wobble signal from the wobble signal generator of the optical disc drive and detects an interpolation ATIP sync signal from the wobble signal;
a number determiner which determines a number of interpolation ATIP sync signals and generates a writing speed transformation control signal based on the number of interpolation ATIP sync signals determined; and
a writing speed adjuster which receives the writing speed transformation control signal from the number determiner and adjusts a writing speed of the optical disc drive.
2. The apparatus of claim 1, wherein the number determiner determines whether a predetermined number of interpolation ATIP sync signals are consecutively detected within a predetermined period of time.
3. The apparatus of claim 1, wherein upon determining that the predetermined number of interpolation ATIP sync signals are consecutively detected within the predetermined period of time, the writing speed adjuster applies a writing stop control signal to an optical disc drive controller so that the optical disc drive enters a pause mode, adjusts the writing speed to a speed of the optical disc, and applies a writing speed adjustment control signal to the optical disc drive to adjust the writing speed.
4. The apparatus of claim 1, wherein the writing speed adjuster adjusts the writing speed by monitoring a plurality of control signals in real time.
5. A method of preventing a writing error on an optical disc, comprising:
receiving a wobble signal from a wobble signal generator of an optical disc drive and detecting an interpolation ATIP sync signal from the wobble signal;

determining a number of interpolation ATIP sync signals and generating a writing speed transformation control signal based on the determining of the number of interpolation ATIP sync signals; and

adjusting a writing speed of the optical disc drive according to the writing speed transformation control signal.

6. The method of claim 5, wherein the determining of the number of interpolation ATIP sync signals and the generating of the writing speed transformation control signal comprises determining whether a predetermined number or more of interpolation ATIP sync signals are consecutively detected within a predetermined period of time.

7. The method of claim 5, wherein the adjusting the writing speed of the optical disc drive according to the writing speed transformation control signal comprises:

upon determining that the predetermined number of interpolation ATIP sync signals are consecutively detected within the predetermined period of time, allowing the optical disc drive to enter a pause mode;

generating an ATIP sync signal based on the adjusted writing speed;

determining whether the ATIP sync signal based on the adjusted writing speed has been generated; and

restarting writing at the adjusted writing speed.

8. The method of claim 5, wherein adjusting a writing speed is performed by monitoring a plurality of control signals in real time.

9. A computer readable medium encoded with processing instructions for implementing a method of preventing a writing error on an optical disc, the method comprising:

receiving a wobble signal from a wobble signal generator of an optical disc drive and detecting an interpolation ATIP sync signal from the wobble signal;

determining a number of interpolation ATIP sync signals and generating a writing speed transformation control signal based on the determining of the number of interpolation ATIP sync signals; and

adjusting a writing speed of the optical disc drive according to the writing speed transformation control signal.

10. The computer readable medium of claim 9, wherein in the determining of the number of interpolation ATIP sync signals and the generating of the writing speed transformation control signal comprises determining whether a predetermined number of interpolation ATIP sync signals are consecutively detected within a predetermined period of time.

11. The computer readable medium of claim 9, wherein the adjusting the writing speed of the optical disc drive according to the writing speed transformation control signal comprises:

upon determining that the predetermined number of interpolation ATIP sync signals are consecutively detected within the predetermined period of time, allowing the optical disc drive to enter a pause mode;

generating an ATIP sync signal based on the adjusted writing speed;

determining whether the ATIP sync signal based on the adjusted writing speed has been generated correctly; and

restarting the writing at the adjusted writing speed.

12. The computer readable medium of claim 9, wherein the adjusting of the writing speed comprises monitoring a plurality of control signals in real time.